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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/506,828	06/27/2005	Werner Thoren	THOR3002/FJD	6792
23364 7590 12/27/2007 BACON & THOMAS, PLLC 625 SLATERS LANE FOURTH FLOOR ALEXANDRIA, VA 22314			EXAMINER LIN, WEN TAI	
			ART UNIT 2154	PAPER NUMBER
			MAIL DATE 12/27/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/506,828

Applicant(s)

THOREN, WERNER

Examiner

Wen-Tai Lin

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 15, 16, 18 and 20-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15-16, 18 and 20-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Claims 15-16, 18 and 20-25 are presented for examination.
2. Claims 18 and 20 are objected to because they depend on a canceled claim (i.e., claim 17).
3. The text of those sections of Title 35, USC code not included in this action can be found in the prior Office Action.

### ***Claim Rejections - 35 USC § 102***

4. Claims 15-16, 18, 20-22 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Drete et al.[U.S. Pat. No. 5388252].
5. Drete was cited in the previous office action.
6. As to claim 15, Drete teaches the invention as claimed including: a method for reducing an amount of process data to be transferred from a field device [e.g., 10 or 30, Fig.1], the process data including information concerning the operating condition of the

field device, and/or information concerning process variables registered with the field device, and/or identification data of the field device [e.g., col.1 lines 16-36; Figs. 8-9; i.e., information about power supply voltages on different units of the machine], comprising the steps of:

evaluating and storing the process data occurring during an interval between two transfers of data, wherein the process data are reduced by means of the evaluating; transferring the reduced process data to a process control center [e.g., claim 1 on cols. 17-18];

dividing the process data in the evaluating into static and dynamic data, wherein: process data which have changed since the last executed evaluating are classified as dynamic data, and static data are transferred as binary state values [e.g., col.11 line 48 – col. 12 line 51; i.e., effectively, only changed data are transmitted; note that the static data (i.e., data have not been changed) are represented as binary “0” after the XOR operation (see col. 12, lines 1-67)]; and

each static data are transferred as binary state values [note that each static data are individually represented as zeros before the run-length compression scheme is applied. As such, the actual static values are restored (after decompression at the receiving end) by summing the previous image portions to the current transferred portions].

7. As to claim 16, Dreste further teaches that transfer of the reduced process data is executed only at the occurrence of specified conditions [e.g., 190, Fig.13].

8. As to claim 18, Drete further teaches that for the dynamic data, coded ranges are specified [i.e., since the information is coded in ASCII format, wherein each of the displayable characters is represented as an 8-bit code];

and only the code of the affected range, in which the process parameter is contained, is transferred to the process control center [see the example at cols. 11-12, wherein by comparing current image with the previous image, only changed data are packed and transmitted].

9. As to claim 20, Drete teaches that the method further comprises the step of:  
forming from the dynamic data, a data word to be transferred, wherein:

the data word represents the altered value of the process parameter, or the difference between the new value and the old value of the process parameter [e.g., 206, Fig. 13; col. 12 lines 35-67; i.e., the data word is formed from the XOR results].

10. As to claims 21-22, Drete further teaches that

the specifications for the execution of the transfer of the reduced process data, can be influenced by a user, based on the occurrence of specified events [Figs. 11-12; 190, Fig.13; i.e., a user can influence the transfer of the reduced process data by initiating the modem, followed by injecting various command to monitor/analyze the state of the device being diagnosed].

11. As to claim 25, Dreeste further teaches that the transfer of data from the field device to the process control station is unidirectional; and a bidirectional communication is then implemented when data from the process control station must be transferred to the field device [claim 1].

***Claim Rejections - 35 USC § 103***

12. Claims 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dreeste et al.(hereafter "Dreeste")[U.S. Pat. No. 5388252], as applied to claims 15-22 and 25 above.

13. As to claim 23, Dreeste does not specifically teach that an individual device description file is assigned to the field device by means of the identification data; and information concerning the field device is read out of the data description file.

However, individual field device having an associated description file for showing the principle of the device's operation and diagnostic steps is well known in the art of field service.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide an individual device description file for Dreeste's photographic printer because it offers quick assistance to the person who performs remote diagnostic for the device [e.g., col.3 lines 32-66].

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14. As to claim 24, Drete does not specifically teach using the Internet as communication platform between the field device and the process control station.

However, remote diagnostic system using the Internet as communication platform is well known in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to also include the Internet as Drete's communication platform because it enables Drete's remote diagnostic task to be initiated from anywhere the Internet is available.

15. Applicant's arguments filed on 9/10/07 for claims 15-16, 18 and 20-25 have been fully considered but they are not deemed to be persuasive.

Specifically, Applicant argues that by amending the claim to show that each static data are transferred as binary state value would overcome the Drete reference.

Applicant is reminded that Drete's data packing method, when applied to N static data, would first yield N zeros after performing the XOR operation, instead of one zero (see examples in col. 12, lines 1- 67). A further step of run-length type of data compression reduces the N zeros to a four-byte information. This latter step is simply a measure of data compression; all the N static data are individually represented (with binary data) at the remote site after the transmitted four-byte data are decoded.

For at least the above reason, it is submitted that the prior art of record reads on the claims.

***Conclusion***

**Examiner note:** Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant.

Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wen-Tai Lin whose telephone number is (571)272-3969. The examiner can normally be reached on Monday-Friday(8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (571) 272-1915. The fax phone numbers for the organization where this application or proceeding is assigned are as follows:

(571) 273-8300 for official communications; and

(571) 273-3969 for status inquiries draft communication.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Wen-Tai Lin

December 20, 2007

*Wen-Tai Lin*  
12/20/07